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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,048	09/19/2001	Takahiro Naka	Q66292	8499

7590 01/18/2006

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EXAMINER

CAPUTO, LISA M

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,048

Applicant(s)

NAKA, TAKAHIRO

Examiner

Lisa M. Caputo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 14-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7.11/02; 4.10.12/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Election/Restriction

1. Receipt is acknowledged of the response to the election/restriction, filed 2 November 2005. An election was made without traverse to prosecute the invention of Group I, claims 1-14. Claims 14-18 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

2. U.S. Patent No. 5,771,143, FR 2744391, and Japanese abstract No. 10154180 on the IDS form 1449 filed 8 November 2002 were not considered since they were previously considered on the IDS form 1449 filed 22 July 2002. EP 0985537 on the IDS form 1449 filed 19 April 2004 was not considered since it was previously considered on the IDS form 1449 filed 8 November 2002.

Specification

3. The abstract of the disclosure is objected to because the word "disclosed" and the phrase "and the like" appear in the specification. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

The use of the word "optional" to describe the part in claim 1 has the connotation that the part is unnecessary, and hence makes the claim somewhat ambiguous.

Examiner submits that a possible substitution for the word "optional" is --separable-- so that the meaning of the claim is more clear and definite.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Funayama et al. (U.S. Patent No. 6,593,952, from hereinafter "Funayama").

Funayama teaches a printing system. Regarding claims 1, 5-6, and 8, Funayama teaches an optional part (ink ribbon cartridge 11) of an apparatus (printer apparatus 12) that is sold separately from the apparatus body, comprising a storage device (tag 50 which comprises a loop-like antenna 54 and a memory IC chip 55 having an EEPROM 60) for storing control information required for a predetermined operation of said apparatus in a state where the optional part is fitted thereto, said storage device being contactlessly (i.e. the use of the antenna) accessible in a distribution channel from a manufacturer to a consumer. In addition to the apparatus, Funayama discloses of the accessing device to access information in the storage device, and the method for

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distributing the part (see Figures 3, 9, 12, 14, col 5, lines 45-52, col 6, lines 53-65, col 7, lines 9-26, col 8, lines 47-54, col 17, lines 20-65). Regarding claims 5, 6, and 8, in addition to these limitations, Funayama also teaches that the optional part is fitted to the apparatus body and that the apparatus body performs a predetermined operation only when the control information is stored in the storage device. For example, when the ribbon cartridge 11 is charged into the printer apparatus 12, the printer side antenna 81 is opposed concentrically with the tab side antenna 54 of the tag 50 attached to the ribbon cartridge 11 at a predetermined distance, whereby the printer side communicating section 83 is capable of communicating with the tab side communicating section 61 by way of the printer side antenna 81 and the tab side antenna 54 (see Figure 7, col 8, lines 47-55).

Regarding claims 2 and 9, Funayama teaches that the storing of control information is, in one instance, changing incorrect control information to correct control information when it is taught that through the CPU 84 of the printer apparatus 12 updates the number of used sheets stored in the EEPROM 60 of the tag 50 by the subtraction of 1 each time the image on the screen is printed (see Figure 14, col 16, lines 20-30).

Regarding claims 4 and 7, Funayama teaches that the control information can be stored in the storage device by contactlessly accessing the storage device from the outside of a package of the optional part when it is taught that the memory IC chip 55 has a communicating section 61 which is configured so as to be capable of communication with an outside by way of an EEPROM 60 which preliminarily stores

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data such as a kind of ink ribbon 20, a number of sheets used, etc. Further, the tab side communication section 61 receives a transmission signal S1 given from the outside with the tab side antenna 54 and inputs the signal into a turning circuit 62, as a preliminary step (see Figure 9, col 7, lines 9-26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funayama in view of Hara et al. (U.S. Patent No. 6,312,115, from hereinafter "Hara"). The teachings of Funayama have been discussed above.

Regarding claim 3, Funayama fails to teach that the optional part is purchased properly at a retail store.

Hara teaches an ink cartridge and method for manufacturing the same. Hara discloses that, as is shown in FIG. 21B, the packaged ink cartridge 70 is inserted into a case 73, and is ready to be shipped as a product. Where ink cartridge 1 is packed as an accessory of a recording apparatus, it is desirable that ink cartridge 1 indicate when ink 67 has a high degree of degassing and when ink 67 has a slightly lower degree of degassing. As such, an indicating mark and color are printed on case 73 so that these two types of ink cartridges may be easily distinguished (see Figure 21B, col 12, lines 3-

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11). Although Hara does not specifically teach that a retail store sells the ink cartridge, Hara does teach the packaging and shipment of the product, which is well known in the art to be able to be bought at a retail store.

In view of the teaching of Hara, it would have been obvious to one of ordinary skill in the art at the time the invention was made to be able to purchase the ink cartridge properly at a retail store because a retail store is a conventional way to purchase goods that are quality packaged and ready for use.

Regarding claim 10, Funayama teaches an optional part (ink ribbon cartridge 11) of an apparatus (printer apparatus 12) that comprises a storage device (tag 50 which comprises a loop-like antenna 54 and a memory IC chip 55 having an EEPROM 60) to which control information is writable from outside, the control information being required for a predetermined operation of the apparatus in a state where the option part is fitted thereto (see Figures 3, 9, 12, 14, col 5, lines 45-52, col 6, lines 53-65, col 7, lines 9-26, col 8, lines 47-54, col 17, lines 20-65).

Regarding claim 10, Funayama fails to teach that the optional part is decompressedly packed.

Hara teaches that in another embodiment of a method of manufacturing ink tank cartridge 1, after heat fusing seal 19 to cover grooves 170, 171, 172, the additional step of housing the ink cartridge in an evacuation chamber and evacuating ink cartridge 1 prior to the other portion of seal 19 being heat fused to cover 11 is performed. In this manner, ink cartridge 1 may be decompressed again to prevent the formation of foam in the vicinity of packing member 115. Preferably, ink cartridge 1 is evacuated to

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approximately 200 mm Hg (-200 mm) below atmospheric pressure so that ink 67 may be prevented from being ejected from ink inlet ports 100, 101, 102, thereby maximizing the amount of ink 67 contained in ink cartridge 1 (see Figure 8A, col 11, lines 5-20).

In view of the teaching of Hara, it would have been obvious to one of ordinary skill in the art at the time the invention was made to decompress the packaging of the ink cartridge so as to keep harmful processes out (i.e. to prevent the formation of foam as discussed above). It is favorable to prevent harmful processes because in order for the ink cartridge to be working properly, all precautions should be taken to keep the ink cartridges in the best shape possible.

Regarding claim 11, Funayama teaches that the control information is information for identifying a type of the apparatus. In this case, which kind of ink ribbon 20 and how many sheets are used within the apparatus (see Figure 9, col 7, lines 9-19).

Regarding claim 12, Funayama teaches that the distribution information is further writable from outside to the storage device when it is taught that through the CPU 84 of the printer apparatus 12 updates the number of used sheets stored in the EEPROM 60 of the tag 50 by the subtraction of 1 each time the image on the screen is printed (see Figure 14, col 16, lines 20-30). Hence, the distribution information (i.e. sheets used is further writable).

Regarding claim 13, Funayama teaches that the storage device is divided into a region having information written thereto by a manufacturer of the part, a region with information written thereto in the distribution process, and a region having information

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written thereto by said apparatus (i.e. preliminary data in col 7, lines 9-19, during distribution and from the apparatus in col 16, lines 20-30).


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lisa M. Caputo** whose telephone number is **(571) 272-2388**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached at **(571) 272-2398**. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**lisa.caputo@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Lisa M. Caputo
AU 2876
January 9, 2006